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DISCLOSURE TEXT:

1p. Photosensitive material, such as photosensitive polyimide, can be used as an insulating layer between layers of circuitry which are deposited on a ceramic substrate. In such multilayer circuitry, connections or vias must be provided between the various layers of circuitry. It has been found that vias having tapered walls are superior to vias having straight walls. - Vias having tapered walls, such as those shown in Fig. 1B, can be obtained by exposing the photosensitive polyimide using a multi-density glass mask. The multi-density glass mask shown in Fig. 1A has a transparent area 10 in the center and opaque areas 11 on the outer sides. In area 12 the transmissivity varies between transparent and opaque. - When this mask is used to expose the photosensitive polyimide layer and the photosensitive layer is developed, the fully exposed center area is completely washed out, and the partially exposed areas are washed out in a tapered fashion, as shown. The mask 8 can be designed with as many different shades of greyness as necessary to give the appropriate taper.

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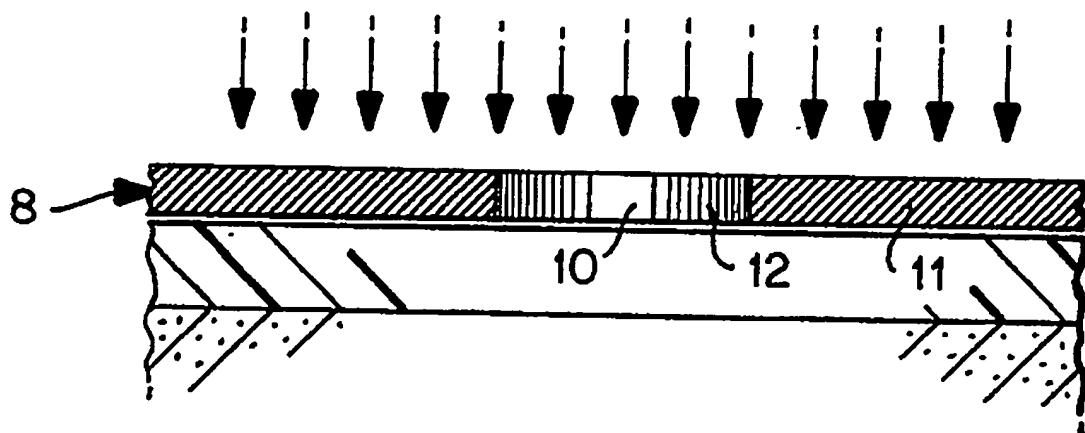


FIG. 1A

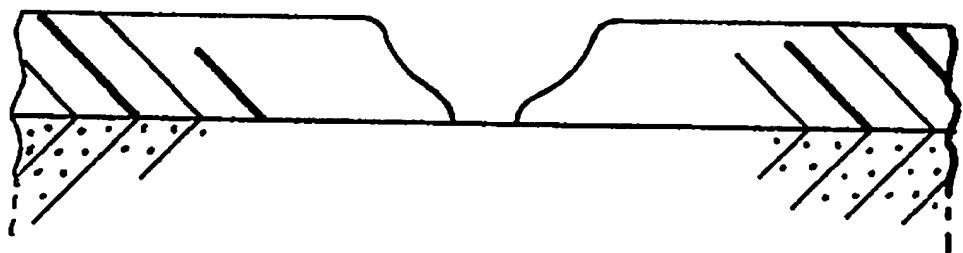


FIG. 1B